

## CLAIMS

1. A cartridge assembly for firearms or weapons, said cartridge assembly including:

5 a support body having a central longitudinal channel housing a plurality of projectiles in end-to-end orientation and having a plurality of circumferential chambers, wherein each chamber houses at least one propellant charge and is located adjacent to a respective projectile;

fluid communication means included in the support body for communicating  
10 the products of a gaseous expansion of said propellant from a respective chamber into said central longitudinal channel;

whereby, upon initiation of a selected propellant charge, the communicated products of gaseous expansion from a circumferential chamber force or eject a  
15 respective projectile from the cartridge assembly.

2. The cartridge assembly as claimed in claim 1 wherein the fluid communication means is provided by a plurality of apertures included in said support body.

20 3. The cartridge assembly of either claim 1 or claim 2 wherein the support body includes a tubular wall portion defining said central longitudinal channel

4. The cartridge assembly of claim 3 wherein said plurality of apertures are provided in the tubular wall portion of said support body.

25 5. The cartridge assembly of any one of claims 1 to 4 wherein a plurality of propellant charges and associated ignition means are disposed in each propellant chamber.

30 6. The cartridge assembly of claim 5 wherein one or more of said plurality of propellant charges may be initiated together or in a desired sequence, according to a desired muzzle velocity for the adjacent projectile.

7. The cartridge assembly of either claim 5 or claim 6 wherein said propellant chamber is divided into a plurality of sub-chambers for respective ones of said plurality of propellant charges.

5 8. The cartridge assembly of any one of claims 1 to 7 wherein the propellant charges are sealed or encased in their respective chambers.

9. The cartridge assembly of claim 8 wherein the propellant charges are sealed by providing obturation means for said plurality of apertures.

10 10. The cartridge assembly of claim 8 wherein the propellant charges comprise a volume of propellant material encased in a bag with an igniter.

11. The cartridge assembly of any preceding claim wherein the support  
15 body has transverse annular walls forming ends of said circumferential chambers.

12. The cartridge assembly of claim 11 wherein said circumferential chambers are divided into a plurality of sub-chambers by radially extending side walls.

20 13. The cartridge assembly of claim 12 wherein the tubular wall portion, which is otherwise a barrier between the inside of each sub-chamber and the central longitudinal channel, has said plurality of apertures therein for each sub-chamber.

25 14. The cartridge assembly of any preceding claim further including a cover arranged about the outer periphery of the support body to close off the radially outward opening of the circumferential chambers.

30 15. The cartridge assembly of any one of claims 1 to 13 wherein the circumferential chambers are closed off by an outer wall integrally formed with the support body.

16. The cartridge assembly of either claim 14 or claim 15 wherein the cylindrical cover or outer wall, is adapted to form, in respective use, a containment barrier to the products of gaseous expansion of propellant, whereby the only path of escape from a circumferential chamber is through said apertures in the tubular wall portion between the circumferential chamber and the central longitudinal channel.

17. A cartridge assembly including a unitary support body, the support body having a central longitudinal channel housing two or more projectiles in abutting end to end orientation and having two or more circumferential chambers located adjacent a respective projectile; wherein each circumferential chamber houses a propellant charge and the support body further has two or more apertures for communicating the products of a gaseous expansion of said propellant from a respective chamber into said central longitudinal channel; whereby, in use, the communicated products of gaseous expansion from a circumferential chamber thus force a respective projectile from the cartridge assembly.

18. The cartridge assembly of claim 17 wherein the outer shape of the support body of the cartridge assembly is cylindrical.

19. The cartridge assembly of either claim 17 or claim 18 wherein the support body has transverse annular walls forming ends of said circumferential chambers.

20. The cartridge assembly of any one of claims 17 to 19 wherein a tubular wall portion of the support body which wall portion is otherwise a barrier between the inside of a chamber and the central longitudinal channel, suitably has said plurality of apertures therein.

21. The cartridge assembly of any one of claims 18 to 20 further including a cylindrical cover arranged about the outer periphery of the substantially cylindrical support body to close off the radially outward opening of the circumferential chambers.

22. The cartridge assembly of any one of claims 17 to 20 further including an outer wall, integrally formed with the support body, to close off the radially outward opening of the circumferential chambers.

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23. The cartridge assembly of either claim 21 or claim 22, wherein the cover or outer wall is adapted to form, in respective use, a containment barrier to the products of gaseous expansion of propellant, whereby the only path of escape from the chamber is through said apertures in the tubular wall between the chamber and the central longitudinal channel.

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24. A cartridge assembly including:

a support body having a central longitudinal channel housing a plurality of projectiles in end-to-end orientation and having a plurality of circumferential chambers, wherein each chamber houses several propellant charges and is located adjacent to a respective projectile;

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a plurality of sub-chambers formed in each circumferential chamber for accommodating a respective propellant charge of said several propellant charges;

fluid communication means included in the support body for communicating the products of a gaseous expansion of said propellant from a respective sub-chamber into said central longitudinal channel.

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25. The cartridge assembly of claim 24 further including a tubular wall portion of the support body for defining, at an inside surface, the central longitudinal channel.

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26. The cartridge assembly of either claim 24 or claim 25 wherein the support body has transverse annular walls forming ends of said circumferential chambers.

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27. The cartridge assembly of any one of claims 24 to 26 wherein the support body has radially extending side walls dividing each circumferential chamber into several sub-chambers.

5           28. The cartridge assembly of any one of claims 24 to 27 wherein each sub-chamber contains a propellant charge comprising a volume of propellant material and an igniter encased in an individual bag.

10           29. The cartridge assembly of any one of claims 25 to 28 wherein said sub-chambers each communicate with the central channel via a longitudinal array of ports provided in the tubular wall portion of the support body.

15           30. The cartridge assembly of any one of claims 24 to 29 wherein, upon initiation of a selected propellant charge, the communicated products of gaseous expansion from a circumferential chamber force or eject a respective projectile from the cartridge assembly.